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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,426	08/13/2001	Stephen F. Gass	SDT 301	9667
27630	7590	12/22/2003	EXAMINER	
SD3, LLC 22409 S.W. NEWLAND ROAD WILSONVILLE, OR 97070			DRUAN, THOMAS J	
			ART UNIT	PAPER NUMBER
			3724	
DATE MAILED: 12/22/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,426

Applicant(s)

GASS ET AL.

Examiner

Thomas J. Druan, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 9-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3-7 & 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-8 in Paper No. 9 is acknowledged. The species restriction has been withdrawn, and all of Group I will be examined.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of double patenting over claim 18 of copending Application No. 10/292,607. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a cutting tool with a contact

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detection means that detects contact with a human and the cutting blade and with another material and the cutting blade, and upon contact with a human, a reaction system causes a predetermined action to take place, and therefore claim 1 is anticipated by Claim 18 of copending Application No. 10/292,607.

37 CFR 1.56 is cited below:

37 CFR 1.56. Duty to disclose information material to patentability.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 4 & 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 4 refers to a contact detection system that is adapted to detect contact between a cutter and person **based on** at least one change in a property that occurs in less than a millisecond. It is not clear if the detection itself occurs in less than a millisecond, or if the detection system merely detects an amount of change which just happens to occur in a millisecond, wherein the interval of detection is not specified.

Similarly, claim 5 refers to a detection system that detects a change **based on** a change in signal that occurs in less than one hundred microseconds, though it is not clear if there is a constraint of the detection interval.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4, 5 & 7 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,942,975 to Sørensen.

Sørensen discloses the invention as claimed including a woodworking machine comprising: a conductive cutter 4 adapted to cut a workpiece; a motor adapted to drive the cutter (inherent); a contact detection system 9 electrically coupled to the cutter to impart an electrical signal thereto, where the electrical signal has at least one property, and where the at least one property, the voltage amplitude of the electrical signal (column 3, lines 28-43), is changed when a person contacts the cutter (column 4, lines

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48-52), and where the contact detection system is adapted to distinguish contact between the cutter and the person from at least one other event generating a comparable amount of change in the at least one property based on at least one change in the at least one property that occurs in less than one hundred microseconds (column 12, lines 40-47); and a reaction system 11 adapted to cause a predetermined action to take place upon detection of contact between the person and the cutter by the contact detection system, where the predetermined action includes stopping movement of the cutter (column 5, lines 24-25).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sørensen.

Sørensen discloses the invention as claimed, but does not specify a contact detection system is adapted to identify contact between a person and the cutter as a reduction in the voltage amplitude of the signal on the cutter of at least 5% within 100 microseconds. Instead, Sørensen detects an increase in voltage amplitude as the system detects an increase in the capacitance of the cutter (column 9, lines 10-36). It would have been obvious to one skilled in the art to detect a decrease in the signal on

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the cutter if the circuit were wired to create a decrease in the signal on the cutter of at least 5% within 100 microseconds rather than an increase so that less power would be used.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sørensen in view of US 6,366,099 to Reddi.

Sørensen discloses the invention substantially as claimed, but does not disclose that the one other event is contact between a cutter and green wood. Reddi teaches that capacitance measuring circuits are used for detecting a human hand (column 3, line 15) as well as for detecting the moisture content of wood (column 3, line 23), and since the device of Sørensen is used as a woodworking machine that detects contact between a human and the cutter, it would have been obvious to one skilled in the art to set the sensitivity of the device of Sørensen to be able to distinguish between an event when green wood contacts the cutter from an event where a human touches the cutter in order to prevent misfiring of the braking system.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sørensen in view of US 3,858,095 to Friemann et al. (hereinafter Friemann).

Sørensen discloses the invention substantially as claimed, but lacks a reaction system that can stop movement of the cutter blade within 10 milliseconds. Friemann teaches the use of a braking system for a saw blade where the reaction system is configured to stop movement of the cutter within 10 milliseconds after contact between

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the cutter and the person (column 4, lines 5-6). It would have been obvious to one skilled in the art at the time of the invention to use the reaction system of Friemann with the device of Sørensen in order to increase the effectiveness of the reaction system.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Druan, Jr. whose telephone number is 703-308-4200. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.


tjd

December 15, 2003



Allan N. Shoap
Supervisory Patent Examiner
Group 3700